

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-27 – cancelled.

28. (currently amended) A method for generating charging data relating to the use of a communications network link arranged to enable information to be passed between a computer system operated by a user and a computer system arranged to provide the user with content over said communications network link, the communications network link involving at least one client/server relationship comprising a plurality of logical connections, the method comprising:

detecting in at least one logical connection of said client/server relationship at least one event causing a change in a state of at least one logical connection defined by at least a client network layer address, a client transport layer address, a server network layer address and a server transport layer address,

recording data created in response to the at least one event detected;
generating charging data on the basis of the recorded data; and
arranging a computer system to provide the user with access to said communications link by:

(a) monitoring changes in the state of logical connections between the user's computer system[,] and the computer system arranged to provide the user

with content, wherein the use of the logical connections provides said content to the user; and

creating the data when the use of the communications link causes at least one of said monitored logical connections to change its ~~stage~~ state by being generated and/or terminated.

29. (previously presented) A method as in claim 28 wherein the use of said logical connection comprises the use of a plurality of socket connections.

30. (previously presented) A method as in claim 29 wherein in said step of recording data a record of the number of all socket connections established and terminated is determined.

31. (previously presented) A method as in claim 29 wherein said plurality of socket connections are at least partially contemporaneous and relate to the same client/server relationship.

32. (previously presented) A method as in claim 28 wherein the information is passed via the computer system arranged to provide access to the user to the computer system arranged to provide content to the user, and wherein the computer system acts as a proxy client and a proxy server.

33. (previously presented) A method as in claim 32 wherein the charging data is generated by the access providing computer system.

34. (previously presented) A method as in claim 32 wherein a monitored logical connection comprises at least one socket connection created between the computer system arranged to provide access to the user acting as proxy server and the computer system of the user acting as a client.

35. (previously presented) A method as in claim 32 wherein a monitored logical connection comprises at least one socket connection created between the computer system arranged to provide access to the user acting as proxy client and the computer system arranged to provide content to the user acting as a server.

36. (previously presented) A method as in claim 28 wherein the computer system arranged to provide access to the user comprises the computer system arranged to provide content to the user.

37. (previously presented) A method as in claim 36 wherein the charging data is generated by the computer system arranged to provide content to the user.

38. (previously presented) A method as in claim 28 wherein at least one logical connection is selected from the group consisting of: a Transmission Control Protocol (TCP) socket connection, a User Datagram Protocol (UDP) socket connection and an Internet Protocol (IP) socket connection.

39. (previously presented) A method as in claim 28 wherein the recorded data comprises a record of information extracted from at least one header prepended to information passing between the computer system arranged to provide content to the user and the computer system of the user during the subsistence of the plurality of logical connections.

40. (currently amended) A method as in claim ~~42~~28 wherein at least one header is selected from the group consisting of:

all Transmission Control Protocol/Internet Protocol (TCP/IP) network layer headers, all TCP/IP transport layer headers and all TCP/IP application layer headers.

41. (previously presented) A method as in claim 28 wherein the communications network link comprises a permanently activated communications network link.

42. (previously presented) Apparatus arranged to generate charging data relating to the use of a communications network link arranged to enable information to be passed between a computer system operated by a user and a computer system arranged to provide the user with content over said communications network link, the communications network link involving at least one client/server relationship comprising a plurality of logical connections, the apparatus comprising:

at least one data processor configured to detect in at least one logical connection of said client/server relationship at least one event causing a change in a state of at least one logical connection defined by at least a client network layer address, a client transport layer address, a server network layer address and a server transport layer address;

a data store recording data created in response to the at least one event detected;

a data processor configured to generate charging data on the basis of the recorded data; and

a computer system arranged to provide said user with access to the communications link including:

- (a) means to monitor changes in the state of logical connections between the user's computer system and the computer system arranged to provide the user with content, wherein the use of the logical connections provides said content to the user; and

- (b) means to create data to be stored when use of the communications link causes at least one of said monitored logical connections to change its state by being generated and/or terminated.

43. (previously presented) Apparatus as in claim 42 wherein said charging data is generated from the recorded data on the basis of the amount of time for which each said at least one logical connection comprising a socket connection is established.

44. (previously presented) Apparatus as in claim 43 wherein the computer system arranged to provide access to the user acts as a proxy server and a proxy client and is arranged to enable information to be passed between the content providing computer system and the computer system of the user.

45. (previously presented) Apparatus as in claim 43 wherein at least one logical connection is selected from the group consisting of: Transmission Control Protocol (TCP) socket connection, a User Datagram Protocol (UDP) socket connection and an Internet Protocol (IP) socket connection.

46. (previously presented) Apparatus as in claim 44 wherein the recorded data further comprises a record of information extracted from at least one header prepended to information passing between the computer system arranged to provide

content to the user and the computer system of the user during the subsistence of the connections.

47. (previously presented) Apparatus as in claim 46 wherein the at least one header comprises at least one selected from the group consisting of all Transmission Control Protocol/Internet Protocol (TCP/IP) network layer headers, all TCP/IP transport layer headers and all TCP/IP application layer headers.

48. (previously presented) Apparatus as in claim 42 wherein the communications network link comprises a permanently activated communications network link.

49. (previously presented) A computer program storage medium on which is stored a server program arranged to implement a method as in claim 28.

50. (previously presented) A method as in claim 28 wherein said content is transmitted in data packets.